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2003

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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims

- (Original) A method of enhancing expression of a desired protein at mucosal effector sites, said method comprising placing the protein to be expressed under the control of a promoter having SED ID NO 2, SED ID NO 3 or SED ID 4 or a fragment or variant or any of these which has promoter activity, and causing expression in mucosal cells.
- (Previously Presented) A construct comprising a promoter selected from the 2. group consisting of P_{ompC} , P_{phoP} and P_{pagC} or fragments or variants thereof which can act as promoters, operatively interconnected with a nucleic acid which encodes a protein, able to induce a protective immune response against an organism, in a mammal to which it is administered, wherein said construct contains no further elements of the ompC, phoP or pagC gene.
- (Currently Amended) The A recombinant gut-colonising microorganism 3. which has been transformed with a the construct of claim 2.
- (Previously Presented) The recombinant gut-colonising microorganism of 4. claim 3 wherein said protein is heterologous to said microorganism.

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Cancelled 5-6.

- (Previously Presented) The recombinant gut-colonising microorganism of 7. claim 3 which comprises a Salmonella spp.
- (Previously Presented) The recombinant gut-colonising microorganism of 8. claim 7 wherein the Salmonella spp. is Salmonella typhimurium or Salmonella typhi.
- (Previously Presented) The recombinant gut-colonising microorganism of 9. claim 3 wherein the gut-colonising microorganism is attenuated.
- (Previously Presented) The construct of claim 2 wherein the heterologous 10. protein is able to induce a protective immune response against Yersinia pestis.
- (Currently Amended) The construct of claim 10 wherein the said heterologous 11. protein comprises an F1-antigen of Yersinia pestis or an antigenic fragment or variant thereof.
- (Previously Presented) A vaccine comprising a recombinant gut-colonising 12. microorganism of claim 3.

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- (Previously Presented) The vaccine of claim 12 which further comprises a 13. pharmaceutically acceptable carrier or diluent.
- (Previously Presented) The vaccine of claim 12 which is adapted for oral 14. administration.
- (Previously Presented) A method of inducing a protective immune response 15. against a pathogen in a mammal, said method comprising administering to said mammal a recombinant gut-colonising microorganism of claim 3.
 - Cancelled 16.
- (Previously Presented) The recombinant gut-colonising microorganism of 17. claim 3 wherein the heterologous protein is able to induce a protective immune response against Yersinia pestis.
- (Previously Presented) The vaccine of claim 13 which is adapted for oral 18. administration.

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- (Previously Presented) The recombinant gut-colonising microorganism of 19. claim 9 which comprises Salmonella spp.
- (Previously Presented) The vaccine of claim 12 wherein the promoter has the 20. sequences of SEQ ID NO 1, SEQ ID NO 2, SEQ ID NO 3 or SEQ ID NO 4.
- (Currently Amended) The recombinant gut-colonising microorganism of claim 21. 19 wherein the Salmonella app.is spp. is Salmonella typhimurium or Salmonella typhi.
- (Currently Amended) The recombinant gut-colonising microorganism of claim 22. 17 wherein the said heterlologous heterologous protein comprises an F1-antigen of Yersinia pestis or an antigenic fragment or variant thereof.